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(72)Inventor: FURUTA KIYOTAKA

## (54) FLAME-RETARDANT EPOXY RESIN COMPOSITION AND PRODUCTION OF INTERLAYER ADHESIVE FILM FOR PRINTED WIRING BOARD AND MULTILAYER PRINTED WIRING BOARD BY USING SAME

## (57)Abstract:

PROBLEM TO BE SOLVED: To obtain an epoxy resin composition improved in flame retardancy, heat resistance, electrical insulation properties, and the ability to firmly adhere to a conductor layer by including a polyfunctional epoxy resin with a roughening component soluble or decomposable in an aqueous oxidizing agent solution, a salt of a basic-nitrogen-containing compound with a polyphosphoric acid, and a curing agent.

SOLUTION: This composition is obtained by compounding a polyfunctional epoxy resin with 5–40 wt.% roughening component being soluble or decomposable in an aqueous oxidizing agent solution and being at least one member selected from among a rubber component, an inorganic filler, and an organic filler, 0.2–10 wt.% (in terms of the phosphorus atoms) salt of a basic-nitrogen-containing compound with a polyphosphoric acid, a curing agent in such an amount that the total of the active hydrogen groups is 0.3–1.0 equivalent per equivalent of the epoxy groups of the epoxy resin, and, optionally, a cure accelerator. The composition is applied to an inner layer circuit board having been subjected to patterning and dried at 50–150° C for 5–30 min. The surface of the resin layer is roughened with an aqueous oxidizing agent solution to form fine irregularities, and a conductor layer is formed on the roughened surface to obtain a multilayer printed board.

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